- 2. (Currently Amended) A hardware computing machine, which will be referred to as an Effector machine, comprising:
- (a) a collection of hardware computing elements, which will be referred to as Effectors, that are each communicatively coupled to at least one other Effector; and
- (b) a machine architecture that

adjusts how the Effectors behave, and
adjusts how information is transmitted from one Effector to another Effector;
wherein a subset of said Effectors is configured to receives information
from a Static program.

- 5. (Currently Amended) A system comprising a computer readable medium storing thereon one or more instructions that constitute an input interpreter for designing at least:
  - a hardware computing machine, which will be referred to as an Effector machine, including at least
    - (a) a collection of hardware computing elements, which will be referred to as Effectors, that are each communicatively coupled to at least one other Effector, and
    - (b) a machine architecture that

adjusts how the Effectors behave, and
adjusts how information is transmitted from one Effector to
another Effector; and

the input interpreter outputs a software Effector machine, which is a design for the hardware Effector machine; and wherein a subset of said Effectors receives information from a Static or Meta program.

11. (Currently Amended) The machine of claim 10 wherein the machine is for running a <a href="the-Meta program">the-Which changes</a>, over time, one or more properties associated with one or more of said Effectors, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors, and each list of values having the parameters,

the machine including at least a portion for receiving the Meta program and for converting the Meta program into input for that machine.

- 14. (Currently Amended) A method comprising designing a machine, at least by evolving a graph representing the machine to produce a design of the machine, the machine being a hardware computing machine, which will be referred to as an Effector machine, including at least
  - (a) a collection of hardware computing elements, which will be referred to as

    Effectors, that are each communicatively coupled to at least one other

    Effector; and
  - (b) a machine architecture that

    adjusts how the Effectors behave, and

    adjusts how information is transmitted from one Effector to another Effector:

## wherein a subset of said Effectors receives information from a Static or Meta program.

- 23. (Currently Amended) A method, comprising: providing a hardware computing machine, which will be called an Effector machine, by at least
- (a) providing a collection of hardware computing elements, which will be referred to as Effectors,
- (b) communicatively coupling each Effector of the collection to at least one other Effector;
- (c) providing a machine architecture that, while the machine is running,

adjusts how Effectors behave, and

adjusts how information is transmitted from one Effector to another Effector; the method further comprising designing said machine architecture by at least evolving a graph associated with the machine architecture;

wherein a subset of said Effectors receives information from a Static or Meta program.

27. (Currently Amended) The method of claim 26, wherein the dynamic machine is for running the Meta program, that which changes, over time, one or more properties associated with one or more of the Effectors, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors, and each list of values having the parameters in a set order, the machine including at least a portion for receiving the Meta program and converting the Meta program into input for the machine.

- 37. (Currently Amended) A hardware computing machine, which will be referred to as an Effector machine, comprising:
- (a) a collection of hardware computing elements, which will be referred to as Effectors, that are each communicatively coupled to at least one other Effector; and(b) a machine architecture that

adjusts how the Effectors behave and adjusts how information is transmitted from one Effector to another Effector; wherein a subset of said Effectors are configured to receives information from a Meta program, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors.

- 48. (Currently Amended) The machine of claim 37, further comprising an input interpreter for designing at least the <u>a</u> Meta program for the Effector machine, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors.
- 49. (Currently Amended) The machine of claim 10 wherein the machine is for running a Meta program, that which changes, over time, one or more properties of said machine, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors, the machine including at least a portion for receiving the Meta program and converting the Meta program into input for that machine.

- 51. (Currently Amended) The method of claim 23 wherein a-the subset of said Effectors, called Input Effectors, are for receiving information from a-the Static program.
- 52. (Currently Amended) The method of claim 23 wherein a-the subset of said Effectors, called Input Effectors, are for receiving information from a-the Meta program, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors.
- 53. (Currently Amended) The method of claim 23 wherein the Effector machine is a first Effector machine, athe subset of said Effectors, called Input Effectors, are for receiving information from an external environment; the Input Effectors are for receiving information from a second Effector machine; the Input Effectors are for receiving information from a the Static program; and the Input Effectors are for receiving information from a the Meta program, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors.
- 54. (Currently Amended) The method of claim 26 wherein the dynamic machine is for running a-the Meta program, that which changes, over time, a threshold associated with one or more Effectors, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors.

- 55. (Currently Amended) The method of claim 26 wherein the dynamic machine is for running a-the Meta program, that which changes, over time, a refractory period associated with one or more Effectors, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors.
- 56. (Previously Presented) The method of claim 26 wherein the dynamic machine is for running a the Meta program, that which changes, over time, a pulse amplitude associated with two or more Effectors, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors.
- 57. (Previously Presented) The method of claim 26 wherein the dynamic machine is for running a-the Meta program, that which changes, over time, a pulse width associated with two or more Effectors, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors.
- 58. (Previously Presented) The method of claim 26 wherein the dynamic machine is for running a-the Meta program, that which changes, over time, a transmission time associated with two or more Effectors, the Meta program being a sequence of sets, each set being a list of values of parameters of Effectors.

Cancel claim 60.

- 61. (Currently Amended) A method, comprising forming a hardware computing machine by at least:
- (a) providing a collection of hardware computing elements, which will be referred to as Effectors,
- (b) providing a machine architecture that

  determines adjusts how Effectors behave, and

  determines adjusts how information is transmitted from one Effector to another

  Effector;
- (c) communicatively couplingeonfiguring each Effector of the collection-to-be

  communicatively coupled to at least one other Effector, and
- (d) eonfiguring wherein a portion of the hardware computing machine for receiving input
  running a Meta program that sets values for one or more parameters of individual
  Effectors from the collections of Effectors, the one or more parameters including
  a time at which information is transmitted from the individual Effectors to another
  of the individual Effectors.
- 62. (Currently Amended) A hardware computing machine, which will be referred to as an Effector machine, comprising:
- (a) a collection of hardware computing elements, which will be referred to as Effectors,
   each Effector of the collection being communicatively coupled to at least one
   other Effector;
- (b) a machine architecture that, while the hardware computing machine is running determines adjusts how the Effectors behave and